Split

Work Order ID 60737 -2

Wednesday, July 21, 2010 1:38:14 PM

Item ID: D4125-1
Revision ID:
Item Name: Sump
Start Date: 7/21/2010 **Start Qty:** ~~2.00~~
Required Date: 7/26/2010 **Req'd Qty:** 2.00
Reference:

Accept

Setup Start
Stop

Cust Item ID:
Customer:

PRELIMINARY ISSUE

Run Start
Stop

Approvals: **Process Plan:** MF **Date:** 10-7-21 **Tooling:** **Date:**
QC: **Date:** **SPC (Y/N):** **Date:**

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	**Revision Nbr**								
D4125	PA4								
100		0.00							
Waterjet		0.00				HB 10-7-22			
FLOW CNC Waterjet	**Memo** 1-Cut as per Dwg Dwg Rev: PA4 Prog Rev: PA4 2-Deburr if necessary								
110	QC2- Inspect parts off machine FAI/FAIB	0.00							
QC	**Memo**	0.00				HB 10-7-22			
Quality Control									

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

H:\FORMS\Quality Assurance\approved QA\NCRWO RevE

Work Order ID 60737

Wednesday, July 21, 2010 1:38:14 PM

Item ID: D4125-1
Revision ID:
Item Name: Sump
Start Date: 7/21/2010 **Start Qty:** 2.00
Required Date: 7/26/2010 **Req'd Qty:** 2.00
Reference:

Accept

Setup **Start**
Stop

Cust Item ID:
Customer:

Run **Start**
Stop

Approvals: **Process Plan:** **Date:** **Tooling:** **Date:**
QC: **Date:** **SPC (Y/N):** **Date:**

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC8- Inspect parts - second check	0.00 - inspector to PAY Day only							
QC	Memo	0.00							
Quality Control									
130	Form as per dwg	0.00							
Brake NC	Memo	0.00							
Brake NC									
140	QC5- Inspect part completeness to step on W/O	0.00 - inspector to PAY Day only							
QC	Memo	0.00							
Quality Control									

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

H:\FORMS\Quality Assurance\approved QA\NCRWO RevE

Work Order ID 60737

Wednesday, July 21, 2010 1:38:14 PM

Item ID: D4125-1 **Accept** **Setup** **Start**

Revision ID:

Item Name: Sump **Stop**

Start Date: 7/21/2010 **Start Qty:** 2.00 **Cust Item ID:**

Required Date: 7/26/2010 **Req'd Qty:** 2.00 **Customer:**

Reference:

Run **Start**

Approvals: **Process Plan:** **Date:** **Tooling:** **Date:**

QC: **Date:** **SPC (Y/N):** **Date:** **Stop**

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	Identify as per dwg & Stock Location: Weld: y	0.00			PD 10.07.28				
Packaging	Memo	0.00							
Packaging									
160	QC21- Final Inspection - Work Order Release	0.00							
QC	Memo	0.00							
Quality Control									

A conformity to Recd.
10.07.30

RD1314

W 10.07.28

POSITIVE RECALL
EFFECTIVE 10-07-28 AUTH
RELEASED _____ DATE _____

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE

Picklist Print

Wednesday, July 21, 2010 1:38:13 PM

T

Work Order ID: 60737

Parent Item: D4125-1

Parent Item Name: Sump

Start Date: 7/21/2010 **Required Date:** 7/26/2010

Start Qty: 2.00 **Required Qty:** 2.00

Comments: IPP Rev:A 10.07.21 new issue DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6S.063 6061-T6 .063 Sheet		Purchased	No			100	sf	117.2640	0.4887	1.028842			

PB10-7-22

Location	Loc Qty	Loc Code
MAT21	117.264	
113608	117.264	

113608

0

P011060
Mag112

P

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	60737
Description: Sump	Part Number:	D4125-1
Inspection Dwg: D4125-1 Rev: PA4		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

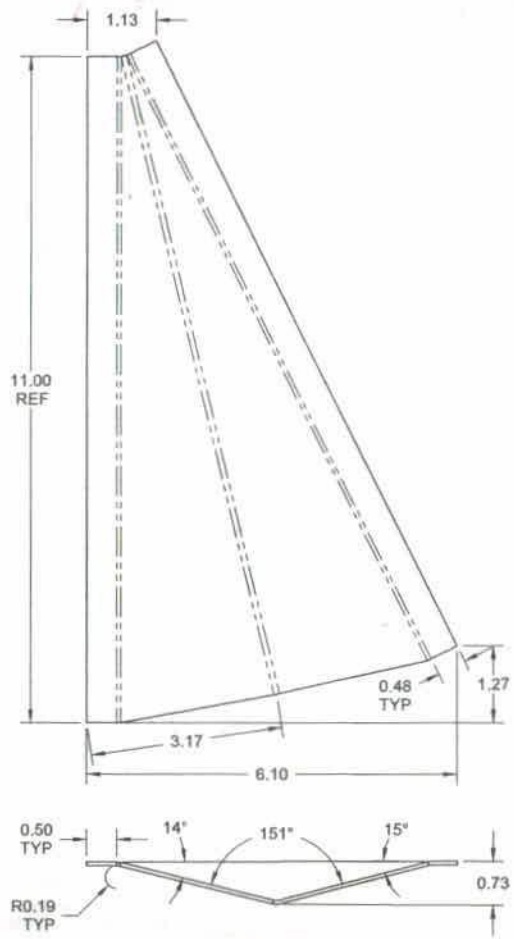
[X] First Article [ ] Prototype

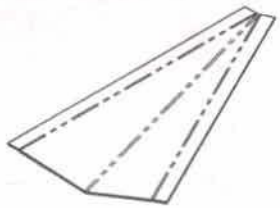
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
11.00	+/- .030	10.996	x		V R02	
1.44	+/- .030	1.465	x		V	
6.27	+/- .030	6.25	x		V	
.063	+/- .010	.063	x		V	

Measured by:	B	Audited by:	S	Prototype Approval:	N/A
Date:	10-7-22	Date:	10/07/22	Date:	N/A

Inspection to PA4 Dwg

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	





PRELIMINARY ISSUE

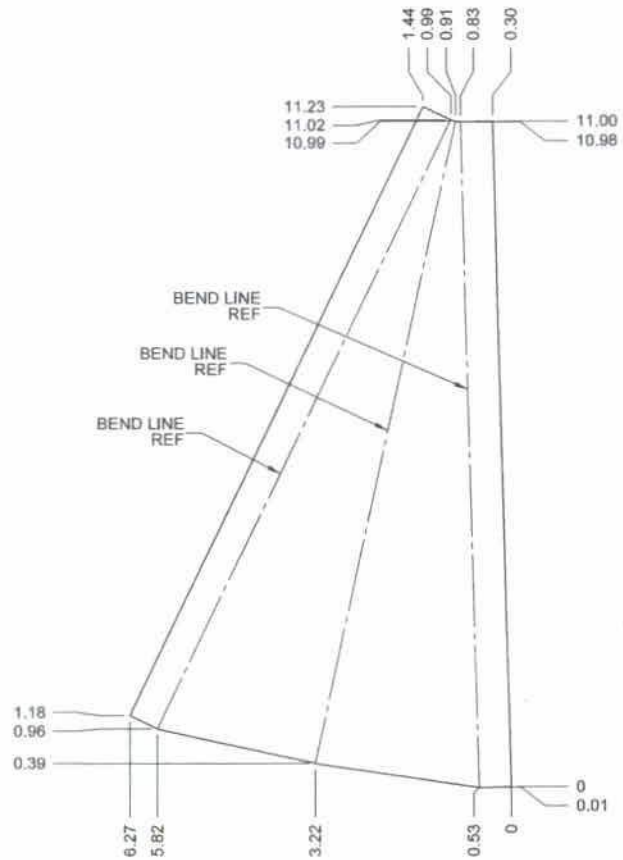
x 2

D4125-1 SUMP

NOTES:
1) MATERIAL: MADE FROM D4125-1F
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A
7) WEIGHT: 0.25 lbs

DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
DRAWN		
CHECKED		DRAWING NO. D4125 — REV. PA4 — SHEET 2 OF 4
MFG. APPR.		
APPROVED		TITLE SUMP — SCALE NTS
DE APPR.		
DATE 10.07.19		

COPYRIGHT © 2016 BY DART AEROSPACE LTD
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



D4125-1F

PRELIMINARY ISSUE

NOTES:
1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET, 0.063 THICK
PER QQ-A-250/11 OR AMS-QQ-A-250/11
OR AMS 4025 OR AMS 4027 OR ASTM B209
REF DART SPEC M6061T6S.063
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A
7) WEIGHT: 0.25 lbs

DESIGN		**DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA
DRAWN		
CHECKED		DRAWING NO. D4125 — REV. PA4 — SHEET 3 OF 4
MFG. APPR.		
APPROVED		TITLE SUMP — SCALE NTS
DE APPR.		
DATE 10.07.19		

COPYRIGHT © 2019 BY DART AEROSPACE LTD
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

Receiving Report

Date: 10/01/11

Supplier: MAGNO

Batch No: M113608

Dart P/O: 11060

Packing Slip: Yes ✓ No ___
Invoice: Yes ___ No ✓
Receipt: Cash ___ Cr ✓

Release Note Attached: Yes ✓ No ___ N/A ___
Waybill Attached: Yes ___ No ✓
Shipment Complete: Yes ___ No ✓
QC6 Inspection ✓ N/A ___
Work Order 1 10/01/11 N/A ✓
N/A ✓

Discrepancies

Part Number	Description	Quantity Ordered	Quantity Received	Quantity Returned	Quantity Short	Comments

Initials of receiver (if shipment OK) Level 12

Production/Admin: Date 10/01/11
Received/Costing Initial

Location

H:\FORMS\Purchasing\approved purch\RECREPORT Rev D

MAGNA INOXYDABLE

Magna Stainless
5775 Kieran St, Saint-Laurent QC H4S 0A3
Phone: (514) 339-1211 Watts: 1-800-363-6646 Fax: (514) 339-1105

INVOIC

 I021

SHIP TO:
DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY , ON
K6A 1K7

MTR:Y

SOLD TO:
DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY , ON
K6A 1K7

INVOICE DATE:	01/11/10
ORDER DATE:	01/07/10
SHIP DATE:	01/11/10
ORDER NUMBER:	W023590
PURCHASE ORDER:	PO11060

Currency	Sales Person	Ship Via	F.O.B.	Terms
CANADIAN DOLLARS	ERYCK BLAIS	NIR:R-557065-1	PREPAID	NET 30 DAYS

Ln	Back Ordered	Ordered	Unit	Description	Shipped	Price Per	Value
				ALUMINUM FLATS			
		4	PC	AFL 6061 T6 1/8" x 3/4" x R/L L026372 20' 4 PC/9 LB	4 UN	5.00	20.0
		2	PC	AFL 6061 T6 1-1/4" x 2" x R/L L030399 20' 2 PC/118 LB	2 UN	133.00	266.0
				ALUMINUM SHEET			
		3	PC	ASH 6061 T6 .125" x 48" x 96" L031565 3 PC/173 LB	3 UN	190.00	570.0
		6	PC	ASH 6061 T6 .063" x 48" x 144" L025694 6 PC/261 LB	288.00 SFT	4.5312	1,304.9
				NO N/A MAT'L			

RECEIVED JAN 18 2010

Merchandise:	2,160.99
Surcharges:	
No Tax Costs:	
GST	108.05

1/12/10 10:47:24

PST Exmp No:EXEMPT

rchase Order Receipt Listing

uary 11, 2010 8:56:50 AM

All amounts are calculated in domestic currency.

Vendors PO ID PO11060 Receipt Dates from 1/11/2010 to 1/11/2010 All Line Item Types
Item ID/GL/WOs All Rec. Employees All Currencies
uped by Vendor ID

rchase der ID/ rr Type	Line Nbr/ Insp Req	Project ID	Reference/ Description/ Cert Std	PO U/M / Stock U/M	Required Date Required Qty	Recv Date/ Recv Emp	Recv Qty (PO U/M)	Cost Per Unit/ Recv Value	Inspected Qty/ Rejected Qty (PO U/M)	MRB Qty/ MRB Reject Qty	Book Amt
orID\Vendor Name		VC-MAG002	Magna Stainless								
1060	2		M6061T6B00750X00 .125	f	1/11/2010	1/11/2010	80.0000	$0.25	0.0000	0	$20.00
)	No		6061-T6 Bar .750 x .125 113608	f	80.0000	Stores		$20.00	0.0000	0	
	3		M6061T6B2.000X01. 250	f	1/11/2010	1/11/2010	40.0000	$11.08	0.0000	0	~~$443.20~~
	No		6061-T6 Bar 2.00 x 1.25 113608	f	24.0000	Stores		$443.20	0.0000	0	
	4		M6061T6S.125	sf	1/11/2010	1/11/2010	96.0000	$5.94	0.0000	0	$570.00
	No		6061-T6 .125 Sheet 113608	sf	96.0000	Stores		$570.00	0.0000	0	
	5		M6061T6S.063	sf	1/11/2010	1/11/2010	288.0000	$4.53	0.0000	0	$1,304.99
	No		6061-T6 .063 Sheet 113608	sf	256.0000	Stores		$1,304.99	0.0000	0	

Total Received Quantity:	504.0000
Total Qty to Inspect (PO U/M):	0.0000
Total Reject Quantity:	0.0000
Total Receipt Value:	$2,338.19
Total Balance Due Quantity:	0.0000

Magna Stainless
5775 Kieran St, Saint-Laurent, Quebec H4S 0A3
Phone: (514) 339-1211 Watts: 1-800-363-6646 Fax: (514) 339-1105

PACKING LIST

 I021555

TO:
AEROSPACE LTD
ABERDEEN STREET
ESBURY , ON
1K7
act: CHANTAL

SHIP TO:
DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY , ON
K6A 1K7
Ship Terms: PREPAID

MTR: Y

SPECIAL INSTRUCTIONS

Currency	Sales Person	Customer Phone	Customer Fax	Customer PO
ADIAN DOLLARS	ERYCK BLAIS	(613) 632-5200	(613) 632-1053	PO11060

es Order	Terms	Ship Via	Date Ordered	Date Required	Date Shipped
3590	NET 30 DAYS	NIR:R-557065-1	01/07/10	01/11/10	01/11/10

ered	Back Ordered	Unit	Description	Bundle #	Heat #	Shipped
			ALUMINUM FLATS			
4		PC	AFL 6061 T6 1/8" x 3/4" x R/L 20' 9 LB / 4 PC	L026372	07C043	4 4
2		PC	AFL 6061 T6 1-1/4" x 2" x R/L 20' 118 LB / 2 PC	L030399	46512	2 2
			ALUMINUM SHEET			
3		PC	ASH 6061 T6 .125" x 48" x 96" 173 LB / 3 PC	L031565	329280101	3 3
6		PC	ASH 6061 T6 .063" x 48" x 144" 261 LB / 6 PC	L025694	K05406A	6 6
			NO N/A MAT'L			

Pu 10/01/11

: 1 Skids: 1

Approx Weight: 561 LB

by:

Date:

DART aerospace
Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PO REPRINT

Purchase Order ID PO11060

Purchase Order Date 1/07/10
PO Print Date 1/07/10

Order From :

MAGNA STAINLESS
5775 RUE KIERAN
ST LAURENT, QC H4S 0A3
CA

VC-MAG002

FAXED

Contact Name		**Buyer**	Chantal Lavoie
Vendor Phone	800 363 6646	**Requisition Nbr**	
Vendor Fax	514 339 1105	**Tax Resale Nbr**	10127-2607
Vendor Account Nbr		**Terms**	Net 30
		Currency	CAD
		FOB	

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Line Nbr	Reference / Revision ID / Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req. Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	M6061T6R0.625	6061-T6 Round Bar .625"	1/15/10 Yes	40.00 f	Yours ppd	$3.8000	$152.00
		Special Inst:	MATERIAL: 6061-T6/651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8/AMS 4117/4128/4115/4116 OR ASTM B211 OR ASTM B221				
	M6061T6B00750X00.125	6061-T6 Bar .750 x .125	1/11/10 Yes	80.00 f	Yours ppd	$0.2500	$20.00
		Special Inst:	MATERIAL SAME AS ABOVE				
	M6061T6B2.000X01.250	6061-T6 Bar 2.00 x 1.25	1/11/10 Yes	24.00 f	Yours ppd	$11.0800	$265.92
		Special Inst:	MATERIAL SAME AS ABOVE				
	M6061T6S.125	6061-T6 .125 Sheet	1/11/10 Yes	96.00 sf	Yours ppd	$5.9375	$570.00
		Special Inst:	MATERIAL: 6061-T6/T62				

DART aerospace
Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PO REPRINT

Purchase Order ID PO11060

Purchase Order Date 1/07/10
PO Print Date 1/07/10

Order From :
MAGNA STAINLESS
5775 RUE KIERAN
ST LAURENT, QC H4S 0A3
CA

VC-MAG002

Contact Name		**Buyer**	Chantal Lavoie
Vendor Phone	800 363 6646	**Requisition Nbr**	
Vendor Fax	514 339 1105	**Tax Resale Nbr**	10127-2607
Vendor Account Nbr		**Terms**	Net 30
		Currency	CAD
		FOB	

			ALUMINUM SHEET AS PER QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS 4025 AMS 4027 OR ASTM B209				
5	M6061T6S.063	6061-T6 .063 Sheet	1/11/10 Yes	256.00 sf	Yours ppd	$4.5312	$1,159.99
		Special Inst:	MATERIAL SAME AS ABOVE				
6	M2024T3S.080	2024-T3 .080 sheet	1/15/10 Yes	196.00 sf	Yours ppd	$10.9375	$2,143.75
		Special Inst:	MATERIAL: 2024-T3 ALUMINUM SHEET AS PER QQ-A-250/4 OR AMS-QQ-AA-250/4 OR AMS 4037 OR ASTM B209				
7	M7075T6B1.000X1.000	7075 T6 BAR 1.00 x1.00	1/15/10 Yes	12.00 f	Yours ppd	$16.2500	$195.00
		Special Inst:	MATERIAL: 7075-T6/T651/T6511/T62 ALUMINUM BAR PER AMS-QQ-A-225/9 OR AMS 4122/4123/4186/4187 OR PER AMS-QQ-A-200/11				
	M304TS0.750W.049	304 SQ Tube .75x.75x.049W	1/15/10 Yes	100.00 f	Yours ppd	$3.2500	$325.00
		Special Inst:	MATERIAL: 304 SEAMLESS SQUARE TUBING NO MILL FINISH				

MATERIAL CERTIFICATION REQ'D UPON DELIVERY

PO Total: **$4,831.66**

No substitution or deviation without consent.
Certificate of Conformity or Material Certification required when applicable

hange Nbr: 2

Change Date: 1/07/10

Novelis Inc.
1 LAPPAN'S LANE
P.O. BOX 2000
KINGSTON, ONTARIO,CANADA K7L4Z5

CERTIFICATION OF PROPERTIES AND CHEMICAL ANALYSIS

SOLD TO:
MANDEL METALS INC
11400 ADDISON STREET

FRANKLIN PARK IL
60131

SHIP TO:
MANDEL METALS INC
11400 ADDISON STREET

FRANKLIN PARK IL
60131

PRINT DATE:
2009/04/17

S 10/01/11

CUST PO: 02-11832
LOAD: HZ84 **PACK:** 52644221
ALLOY: 6061 **TEMPER:** T6
CUST PART #:
COIL: K05406A
GAUGE: 0.0630 in
SALES ORDER: 66515340-0010
NET WT: 9237 lbs
WIDTH: 48.000 in
MECHANICAL SPECIFICATIONS: AMS-QQ-A-250/11-97 ASTM B209-02 AMS4027M
GAUGE LENGTH = 2.00 in

I certify that the materials detailed herein have been tested and that documentary evidence of the test or release certificate is on file.

Per David Custer
Process Leader

P004279

Location: FRONT END		UOM	TEMPER	TEST DATE
UTS	T:45.95	ksi	T6	17-APR-2009
YTS	T:38.17	ksi	T6	17-APR-2009
Elongation	T:13	%	T6	17-APR-2009
Tensile Thickness	T:0.0604	in	T6	17-APR-2009

Location: BACK END				
UTS	T:44.08	ksi	T6	17-APR-2009
YTS	T:37.08	ksi	T6	17-APR-2009
Elongation	T:12	%	T6	17-APR-2009
Tensile Thickness	T:0.0609	in	T6	17-APR-2009

Chemistry
***** LAYER: 01 *****
Al 97.6900 Si 0.5500 Fe 0.4600 Cu 0.2200 Mn 0.0100 Mg 0.8800 Cr 0.1700 Ni 0.0000 Zn 0.0100
Ti 0.0100 Be 0.0000 Pb 0.0000
EACH: 0.0000 TOTAL: 0.0000